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(54) **Raceway outlet station**

Kabelkanal mit Steckdose

Canal de câbles avec boîte à prises de courant

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Description

Technical Field

[0001] The present invention relates to a modular raceway outlet station for use with a trunking duct according to claim 1 and 2, respectively.

Background of the Invention

[0002] Multi-channel wiring raceway systems have become common practice for installation of power and communication conductors within the same duct. These raceway systems are usually used in an office, commercial, or industrial setting where design, layout, production, seating arrangements, and equipment requirements are constantly changed or upgraded. Flexibility and adaptability in these constantly evolving environments makes the surface mount raceway system the preferred method over conductors installed within the walls of a building. However, when a change or modification is required, the power and/or communication outlets usually must be moved, rearranged or supplemented.

[0003] Previous wiring plans and raceway systems, by design, inhibit changes or modifications. In an office environment, each desk, cubicle or seating location requires not only power outlets but also communication outlets, and usually more than one of each. Computers, telephones, facsimile machines, modems, transcriber machines, printers, fans and typewriters are examples of some of the office equipment which requires a plurality of each type of outlet. To accommodate the connectivity needs of the many machines, often many power and communication outlets are positioned at each location. Thus, the ability within the raceway system design to place power and communication outlets where most needed, when required, is of utmost importance.

[0004] Previous designs have unsuccessfully addressed the problems and complications with a variety of proposed solutions, none of which increase the ease or speed of installation. Positioning the power outlet along a central axis of the raceway occupies a considerable amount of space in the communication channel, effectively reducing the total capacity thereof. Other designs which position the power outlet box offset from the raceway commonly use a base plate which forms the bottom of the power outlet box and extends laterally across the raceway, covering all of the channels thereof. A major disadvantage of this design includes the inability to safely, functionally connect the power outlet such that it may be sealed and operational while the other channels of the raceway remain easily accessible for routing of cables. Consequently, all other cables which are to be installed have to be fished through, underneath the base plate covering the raceway, or cut and spliced at the junction, rather than being simply laid in the proper channel. This problem is often enhanced when two different installers are required for the power and communication connections.

[0005] Other disadvantages include increased time and difficulty of installation, cumbersome to maneuver cables and equipment around the base plate, no electrical power available until the electrical installer and communications installer have completed their jobs, and power conductors not isolated from communication conductors until installation is completed.

[0006] DE-U-94 17 099 discloses an electrical installation system that includes a duct 1, receptacles 7 and a wiring compartment 2. The duct 1 has a divider wall and a top access opening. The wiring compartment 2 is adapted to be disposed over the duct top access opening. The receptacles 7 are offset surface-mount boxes having and open side wall area adjacent to the duct 1. The wiring compartment 2 is divided into sections or passages that extend between respective channels of duct 1 and corresponding receptacles 7 such that conductors may be routed out of a given channel in the duct, through a corresponding section or passage in the wiring compartment, and into a corresponding receptacle.

[0007] In this system the wiring compartment 2 must first be installed before the power conductors may be routed into the receptacles 7.

[0008] Therefore, in the design of raceway systems, more economical, easier to install outlet stations are desired, and improvement in the art of raceway modular power and communication outlets is needed.

Summary of the Invention

[0009] It is therefore an object of the present invention to provide an improved two-part raceway outlet station or an integral raceway outlet station having power and communication outlet facilities.

[0010] This object is accomplished by the features defined in claim 1 and 2, respectively.

[0011] In general, a modular raceway outlet station for use with a trunking duct which has a divider wall and a top access opening, includes an offset power box having a

[0012] projection extending lateral from a top wall of the box having a top portion and an abutment portion which depends from the furthest extent of the top portion and is adapted to be substantially aligned with an adjacent edge of the top access opening, wherein the abutment portion does not project into the top access opening; and an opening formed in the abutment portion of the projection which is in communication with an aperture formed in a side wall of the box adjacent the duct. The outlet station further includes, a communication extension which is adapted to extend over the top access opening having an abutment surface which aligns flush against the abutment portion of the projection; a routing notch formed in the abutment surface corresponding in longitudinal extent to the opening formed in the abutment portion of the projection; and a guide wall depend-

ing from the extension, interiorly adjacent the routing notch, having a longitudinal extent greater than the routing notch, and adapted to be substantially vertically aligned with the divider wall. Wherein, the power conductors may be routed out of and over the duct, and into the offset power box before installation of the extension and the power conductors remain completely isolated from the communication conductors after the extension is installed.

Brief Description of the Drawings

[0013]

FIG. 1 is a perspective view of the raceway outlet station completely assembled and as used with a raceway system;
FIG. 2 is a partially broken away perspective view of the raceway outlet station of FIG. 1 as used with a raceway system, showing the power wires routed into the power box;
FIG. 3 is an exploded view of the raceway outlet station of FIG. 1, as used with a raceway system;
FIG. 4 is a top exploded view of the raceway outlet station of FIG. 1;
FIG. 5 is a bottom exploded view of the raceway outlet station of FIG. 1;
FIG. 6 is a partially broken away top view of the raceway outlet station of FIG. 1, as used with a raceway system, showing the power wires routed into the power box;
FIG. 7 is a transverse cross-sectional view of the raceway outlet station and raceway system of FIG. 6 taken along section line 7-7;
FIG. 8 is a cross-sectional view of the raceway outlet station and raceway system of FIG. 7 taken along section line 8-8;
FIG. 9 is a cross-sectional view of the raceway outlet station and raceway system of FIG. 7 taken along section line 9-9;
FIG. 10 is a broken away transverse cross-sectional view of the raceway outlet station and raceway system of FIG. 6 taken along section line 10-10;
FIG. 11 is a perspective view of an alternative form of the raceway outlet station of FIG. 1; and
FIG. 12 is a transverse cross-sectional view of the alternative form of the raceway outlet station of FIG. 11 taken along section line 12-12.

Description of the Preferred Embodiments

[0014] A raceway outlet station embodying the concept of the present invention is designated generally by the reference numeral 10 in the accompanying drawings. As shown in FIGS. 1-5, the raceway outlet station 10 is generally comprised of an offset power box 12 and a communication extension 14, which cooperate with a wiring raceway system 16 to expand the capabilities thereof. The raceway system 16 is comprised of a trunking duct 18, which has a plurality of latching elements 20 disposed on the duct base 19, a divider wall 22, which separates the duct 18 into a power channel 24 and a communication channel 26, a duct top access opening 28 with associated latching elements 21, duct side walls 23, and duct cover 30, which has a pair of laterally displaced latching elements 32 that cooperate with the access opening latching elements 21 to retain the duct cover 30 thereon. Power conductors 34 are disposed in a smaller power channel 24, which is shown to the left of the divider wall 22 in FIGS. 1, 2 and 7. Preferably, the offset power box 12 is mounted adjacent the power channel 24. Communication conductors 36, of which there are commonly more, are placed in the larger communication channel 26, which is shown to the right of the divider wall 22 in FIGS. 1, 2 and 7. Preferably, the extension receiving aperture 122 is in communication with the channel 26 when the extension 14 is installed.

[0015] The offset power box 12, as shown in FIGS. 4 and 5, preferably represents a rectangular box-like structure, which is generally similar to a conventional surface mount power receptacle box. The power box 12 has a top wall 38, a pair of sidewalls 40, a pair of end walls 42, and a bottom wall 44. A receiving area 46 is generally defined within the interior of the box by an opening 48 in the top wall 38, a pair of interior end walls 43, an interior sidewall 41 opposite the duct 18, another side wall 40 in common with the box 12 adjacent the duct 18, and a bottom wall 44 in common with the box 12. The receiving area 46 preferably accommodates and facilitates the installation of a single receptacle 50, as shown in FIGS. 3, 6 and 7. Communication outlets of various styles may also be mounted in the receiving area 46, if so desired. Mounting bosses 52 are provided therein, which engage the fasteners (not shown) to positively retain the receptacle 50 within the box 12. Disposed on the bottom wall 44 of the box 12 are mounting apertures 54 which enable the box to be positively secured to a mounting surface (not shown) with fasteners (not shown), such as screws, as the primary means of positioning the box 12. A secondary means will be described below.

[0016] The top wall 38 of the box 12 has a longitudinally defined recessed portion 56 so configured to receive a receptacle faceplate 58 of conventional dimensions. A common power or communication screw-mounted faceplate (not shown) can be accommodated, or a snap-in faceplate 58, shown in FIGS. 1-3 and 7, which has integral latching elements 60 depending therefrom to engage the latching elements 62 disposed adjacent corners of the recessed portion 56. Latching elements 60 each have a pair of equivalent length depending members configured as arrowheads with the exterior portions removed at the furthest extent thereof. The opposing half arrowheads bias each other into engagement with the latching elements 62, as best shown in FIGS. 5, 7 and 10 as a ledge 63 resulting from a de-

crease in cross-section of the box side wall 40. Cooperation of these two latching elements 60 and 62 provides extremely positive retention of the faceplate 58. Slots 64 are provided at selected corners of the faceplate 58 to assist removal of faceplate 58 from power box 12.

[0017] As shown in FIGS. 3-5, the box 12 has a projection 66 which laterally extends from the box 12 toward the trunking duct 18. Formed primarily by extensions of the top wall 38 and side walls 40, the projection 66 has a top portion 68, end flanges 70, interior flanges 72, and an abutment portion 74. The end and interior flanges 70 and 72 are preferably contoured to provide a flush fit when the box 12 is properly positioned immediately adjacent the duct 18. The abutment portion 74 vertically depends from the furthest lateral extent of the top portion 68 such that it is substantially vertically aligned with the adjacent edge 29 of the duct top access opening 28. When so positioned, no part of the abutment portion 74 projects into the top access opening 28 and the duct covers 30 may be installed without interference from the projection 66. The top portion 68 helps retain power conductors 34 when routed over the duct side wall 23. Additionally, alignment bosses 76 may extend and depend from the abutment portion 74. These generally block-shaped features may also have latching elements 78 formed therein, which are positioned to engage the access opening latching elements 21 and provide an additional secondary securing means for the offset power box 12. The alignment bosses 76 further provide a form of stopping means or positioning mechanism for the duct covers 30, as will be described below.

[0018] An opening 80 is formed in the abutment portion 74 and preferably extends between two adjacent interior flanges 72. The longitudinal extent of the opening, however, may be as large as the distance between the two alignment bosses 76 depending on the application. The box side wall 40 also has an aperture 82 formed therein, preferably extending longitudinally between the same two adjacent interior flanges 72. Again, the longitudinal extent of the aperture 82 may be as large as the distance between the two alignment bosses 76 depending on the application. Whatever the longitudinal extent of the opening 80 and aperture 82, they are joined by a passage 84 which is bounded by the same two adjacent interior flanges 72, the exterior of the duct 18, and a bottom surface of the top portion 68. This passage 84 enables an installer to affix the box 12 into proper position and safely route the power conductors 34 out of the power channel 24, over the top of the duct side wall 23, and into the box receiving area 46 so that the power receptacle 50 may be functionally connected thereto as shown in FIGS. 2 and 6-8. The faceplate 58 may then be installed and the outlet safely operational without interfering with the installation of any communication conductors 36.

[0019] The communication extension 14 is preferably the second piece of the raceway outlet station 10 which is aligned with the offset power box 12, when finally positioned, and appears to be a lateral projection thereof. Alternatively, the modular two-piece design could be formed as an integral unit 200, as shown in FIGS. 11 and 12, having all of the same features as detailed below, except an integral abutment wall 126 generally is comprised of the abutment portion 74 and the abutment surface 94. In position, the extension 14 conforms to the exterior contours of the raceway system 16 and facilitates the installation of a communication outlet 86, such as shown in FIGS. 1, 3, 6 and 7. The extension 14 has a top surface 88, which has a longitudinally defined recessed surface 90, a pair of end surfaces 92, a receiving aperture 122 and an abutment surface 94. Much like the recessed portion 56 of the box 12, the extension recessed surface 90 is for positioning an extension faceplate 96, which is dimensionally equivalent to the box faceplate 58 and other commonly available communication faceplates. The extension faceplate 96 also has integral latching elements 98, similar to those described above, which engage latching elements 100 disposed below the top surface 88 of extension 14 and having the same geometry as the box latching elements 62. Preferably, an aperture 124 is disposed on the faceplate 96 to receive a communication outlet 86, while maintaining the required minimum one inch bend radius, as shown in FIGS. 7 and 9.

[0020] Mounting bosses 102 depend from a groove-defined knockout section 104 of the extension 14 to provide support for apertures 106 to which common communication faceplates (not shown) may be attached by conventional fasteners (not shown) such as screws. The end surfaces 92 depend from the top surface 88 a certain amount which provides a flush, overlapping fit with the duct covers 30 and the exterior of the duct 18. Slots 108 are formed in the end surfaces 92 opposite the power box 12 to assist in removal of the extension 14, when required.

[0021] The abutment surface 94 depends from the longitudinal edge of the top surface 88 adjacent the box 12, and, when finally positioned, aligns flush against the abutment portion 74 of the projection 66. Alignment notches 110 are formed in the abutment surface 94 and disposed in a position spaced longitudinally exterior each extension faceplate latching element 100 adjacent the power box 12. The alignment bosses 76 are received or captured within the nearly equivalently dimensioned alignment notches 110 to precisely position the extension 14 in relation to the power box 12. Additionally disposed on the abutment surface 94 are one of the two pairs of extension latching elements 112, which depend from the extension 14 and incorporate a geometry similar to that of the faceplates described above. The latching elements 112 are disposed longitudinally interior of each of the extension faceplate latch elements 100, and at positions laterally disposed therefrom. Access opening latching elements 21 are substantially aligned to cooperate with all of the extension latching elements 112 for positive retention of the extension 14 to the duct 18.

An additional latching element 114 is disposed in longitudinal alignment with the pair of latching elements 112 opposite the power box 12 for increased holding power.

[0022] A routing notch 116 is formed in the abutment surface 94 between the longitudinally spaced extension latching elements 112 adjacent the power box 12, and preferably corresponding in longitudinal extent to the opening 80 formed in the abutment portion 74 of the power box 12. A slight bevel 118 further defines the routing notch 116 and provides increased clearance for routing the power conductors 34. Additionally, a guide wall 120 depends from the extension 14 interiorly adjacent the routing notch 116. The edge of the extension receiving aperture 122 adjacent the power box 12 is further defined thereby. Further, the guide wall 120 substantially aligns with the divider wall 22 of the raceway system 16, thereby keeping the power conductors 34 completely isolated from the communication conductors 36. Preferably, the longitudinal extent of the guide wall 120 is equivalent to the longitudinal spacing between the exterior edges of the alignment notches 110, however a lesser extent may be permissible in certain circumstances.

[0023] In order to assemble, as shown in FIG. 3, an installer first positions the trunking duct 18 in the preselected location and affixes accordingly. Then, at the predetermined locations for the power and communication outlets, the offset power box 12 is snap-fitted immediately adjacent to the duct 18 by depressing alignment latching elements 78 onto the access opening latching elements 21. Fasteners (not shown) may then be used to secure the box 12 to the mounting surface through the mounting apertures 54. With the power box 12 properly situated, the divider wall 22, if not formed as integral with the duct 18, is installed by engaging the duct latching elements 20. The power conductors 34 may then be laid into position in the power channel 24 through the top access opening 28.

[0024] Operatively connecting the power conductors 34 to the power receptacle 50 can now be achieved. In order to accomplish this task, the power conductors 34 must be routed out of the power channel 24 and top access opening 28, over the duct sidewall 23, through the opening 80, passage 84 and aperture 82, and into the receiving area 46, as shown in FIGS. 2 and 6-8. Then the power receptacle 50 may be connected to the power conductors 34 and secured to the mounting bosses 52. The box faceplate 58 is preferably snapped into position, or fastened by other means, thus sealing the power box 12. Consequently, this offset power box 12 may now be used as it is operational.

[0025] When communication outlets are to be additionally installed, the extension 14 must be used. First the communication conductors 36 are laid in the communication channel 26 through the top access opening 28. After the proper conductors have been selected, the extension 14 may be installed. This is accomplished by positioning the alignment notches 110 over the alignment bosses 76, and depressing the extension such that latching elements 112 and 114 positively engage the access opening latching elements 21, as shown in FIGS. 2 and 6. The routing notch 116 and bevel 118 prevent the abutment surface 94 from interfering with or impinging upon the power conductors 34 routed into the box. Additionally, the guide wall 120 substantially aligns with the divider wall 22 to completely isolate the communication channel 26 from the power conductors 24, as shown in FIGS. 7, 9 and 10.

[0026] Through the receiving aperture 122 the installer may select the proper communication conductors 36 to be terminated at a communication outlet 86. Once completed, the desired communication outlets are fastened to a faceplate 96 which preferably snaps into engagement with the extension 14, as shown in FIGS. 6-10 or is affixed by common fasteners to mounting bosses 102. Knock-out sections 104 may be removed to provide additional access for communication outlets or other requirements. The duct covers 30 are preferably snapped onto the duct 18 and slid under the extension 14 until stopping flush against the alignment bosses 76, as shown in FIG. 9. The extension 14 overlaps the duct covers 30 giving a clean aesthetic appearance.

[0027] Generally, the same assembly procedure is followed when the integrally-formed station 200 is selected, of course, allowing for the one-piece construction.

Claims

1. A modular raceway outlet station (10) for use with a trunking duct (18) which has a divider wall (22) and a top access opening (28) comprising:

an offset power box (12) having,

a projection (66) extending laterally from a top wall (38) of the box (12) having a top portion (68) and an abutment portion (74) depending from the furthest extent of the top portion adapted to be disposed substantially aligned with an adjacent edge of the top access opening (28); and

an opening (80) formed in the abutment portion (74) of the projection (66) being in communication with an aperture formed in a side wall of the box (12) adjacent the duct (18); and

a communication extension (14) adapted to be disposed over the duct top access opening (28) having,

an abutment surface (94) depending from a top surface (88) of the extension (14) adapted to be disposed flush against the abutment portion (74) of the projection;

a routing notch formed in the abutment surface (94) and

a guide wall (120) depending from the ex-

tension (14) interiorly adjacent the routing notch (116), adapted to be substantially vertically aligned with the divider wall 22,

wherein power conductors (34) may be routed out of and over the duct (18), through the routing notch (116), and into the offset power box (12) before installation of the extension (14), such that the power conductors (34) are isolated from communication conductors (36) when the extension is installed.

2. An integrally formed raceway outlet station (10) for use with a trunking duct (18) which has a divider wall (22) and a top access opening (28) comprising:

an offset power box (12) having, a projection (66) extending laterally from a top wall (38) of the box (12);
a communication extension (14) adapted to be disposed over the duct top access opening (28) having, a guide wall (120) depending from the extension (14) adapted to be substantially vertically aligned with the divider wall (22); and
an abutment wall (126) disposed between the offset box projection (66) and the extension (14), depending in part from each, having a routing notch (116) formed laterally therethrough in communication with an aperture formed in a sidewall of the box adjacent the duct,

wherein power conductors (34) may be routed out of and over the duct (18), through the routing notch (116), and into the offset power box (12) such that the power conductors (34) are isolated from communication conductors (36),

3. A modular raceway outlet station according to claim 1 or 2, further having alignment bosses (76) which extend and depend from the abutment portion (74) and have disposed thereon means (78) for latching which are adapted to be operatively associated with the duct (18), wherein the alignment bosses (76) are further adapted to provide a positioning stop for a duct cover (30).

4. A modular raceway outlet station according to claim 3 further having extension latching means (112) which depend from the extension (14) and are adapted to be operatively associated with the duct (18), and means for latching a faceplate (96) to the top surface of the extension (14) disposed spaced longitudinally exterior each extension latching means.

5. A modular raceway outlet station according to claim 4, further having alignment notches (110) formed in the abutment surface (94), disposed longitudinally exterior each means for latching a faceplate (96) adjacent the offset power box (12), which are operatively associated with the alignment bosses to align box end walls and extension end surfaces.

6. A modular raceway outlet station according to claim 4, wherein the means for latching a faceplate comprises cored-out latching elements (100) disposed adjacent each corner of the extension (14).

7. A modular raceway outlet station according to claim 4, wherein the means for latching a faceplate (96) comprises apertures (106) disposed on the top surface of the extension (14) and depending mounting bosses (102) disposed under each aperture (106).

8. A modular raceway outlet station according to claim 1 or 2, further having means (102, 106, 110) for latching a faceplate (96) to the top wall of the offset power box (12).

9. A modular raceway, outlet station according to claim 1, wherein the offset power box (12) and the extension (14) are separate, non-integral elements.

Patentansprüche

1. Modulare Kabelleistensteckdosenstation (10) für einen Kabelkanal (18), der eine Trennwand (22) und eine obere Zugangsöffnung (28) hat, bestehend aus

einem versetzten Netzanschlussgehäuse (12) mit

einem Vorsprung (66), der sich von einer oberen Wand (38) des Gehäuses (12) aus erstreckt, das einen oberen Abschnitt (68) und einen Anschlagabschnitt (74) hat, der von der äußersten Erstreckung des oberen Abschnitts nach unten verläuft, und im Wesentlichen ausgerichtet auf eine benachbarte Kante der oberen Zugangsöffnung (28) angeordnet werden kann, und

einer Öffnung (80), die im Anschlagabschnitt (74) des Vorsprungs (66) in Verbindung mit einer in einer Seitenwand des Gehäuses (12) nahe dem Kanal (18) ausgebildeten Öffnung in Verbindung steht, und

einem Datenübertragungsanschluss (14), der über der oberen Kanalzugangsöffnung (28) angeordnet werden kann, und

eine Anschlagsfläche (94) hat, die von einer oberen Fläche (88) des Anschlusses (14) nach unten verläuft, so dass sie bündig am Anschlagabschnitt (74) des Vorsprungs angeordnet werden kann,

einer Führungsnut, die in der Anschlagsfläche (94) ausgebildet ist, und

einer Führungswand (120), die sich vom Datenübertragungsanschluss (14) innen nahe der Führungsnut (116) nach unten erstreckt, so dass sie im Wesentlichen vertikal fluchtend mit der Trennwand (22) angeordnet werden kann,

wobei Netzleiter (34) aus dem und über den Kanal (18) durch die Führungsnut (116) und in das versetzte Netzanschlussgehäuse (12) vor der Installation des Datenübertragungsanschlusses (14) geführt werden können, so dass die Netzleiter (34) von Kommunikationsleitern (36) isoliert sind, wenn der Datenübertragungsanschluss installiert ist.

2. Einstückig geformte Kabelleistensteckdosenstation (10) für einen Kabelkanal (18), der eine Trennwand (22) und eine obere Zugangsöffnung (28) hat, bestehend aus:

einem versetzten Netzanschlussgehäuse (12) mit einem Vorsprung (66), der sich von einer oberen Wand (38) des Gehäuses (12) aus seitlich erstreckt,
einem Datenübertragungsanschluss (14), der über der oberen Kanalzugangsöffnung (28) angeordnet werden kann und eine Führungswand (120) hat, die sich vom Datenübertragungsanschluss aus nach unten erstreckt, um im Wesentlichen vertikal mit der Trennwand (22) zu fluchten, und
einer Anschlagwand (126), die zwischen dem Vorsprung (66) des versetzten Gehäuses und dem Datenübertragungsanschluss (14) jeweils teilweise nach unten verläuft und eine Führungsnut (116) hat, die seitlich durchgehend in Verbindung mit einer Öffnung in einer Seitenwand des Gehäuses nahe dem Kanal ausgebildet ist,

wobei Netzleiter (34) aus dem und über den Kanal (18) durch die Führungsnut (116) und in das versetzte Gehäuse (12) geführt werden können, so dass die Netzleiter (34) von Kommunikationsleitern (36) isoliert sind.

3. Modulare Kabelleistensteckdosenstation nach Anspruch 1 oder 2, weiterhin aufweisend Fluchtungsvorsprünge (76), die sich von dem Anschlagabschnitt (74) nach unten erstrecken und daran Verriegelungseinrichtungen (78) aufweisen, die funktionsmäßig dem Kanal (18) zugeordnet werden können, wobei die Fluchtungsvorsprünge (78) außerdem einen Positionierungsanschlag für einen Kanaldeckel (30) bilden.

4. Modulare Kabelleistensteckdosenstation nach Anspruch 3, weiterhin aufweisend Verlängerungsverriegelungseinrichtungen (112), die sich vom Datenübertragungsanschluss (14) nach unten erstrecken und funktionsmäßig dem Kanal (18) zugeordnet werden können, und Einrichtungen zum Verriegeln einer Fronplatte (96) an der oberen Fläche des Datenübertragungsanschlusses (14), die in Längsrichtung außerhalb jeder Verlängerungsverriegelungseinrichtung beabstandet angeordnet ist.

5. Modulare Kabelleistensteckdosenstation nach Anspruch 4, weiterhin aufweisend Fluchtungsnuten (110), die in der Anschlagfläche (94) ausgebildet und in Längsrichtung außerhalb jeder Einrichtung zur Verriegelung einer Frontplatte (96) nahe dem versetzten Netzanschlussgehäuse (12) angeordnet und funktionsmäßig den Fluchtungsvorsprüngen angeordnet sind, um Gehäuseendwände und Datenübertragungsanschlussendflächen auszurichten.

6. Modulare Kabelleistensteckdosenstation nach Anspruch 4, bei der die Einrichtung zum Verriegeln einer Frontplatte ausgeschnittene Verriegelungselemente (100) aufweist, die nahe jeder Ecke des Datenübertragungsanschlusses (14) angeordnet sind.

7. Modulare Kabelleistensteckdosenstation nach Anspruch 4, bei der die Einrichtung zum Verriegeln einer Frontplatte (96) Öffnungen (106) aufweist, die in der oberen Fläche des Datenübertragungsanschlusses (14) angeordnet sind, sowie nach unten verlaufende Befestigungsvorsprünge (102), die unter jeder Öffnung (106) angeordnet sind.

8. Modulare Kabelleistensteckdosenstation nach Anspruch 1 oder 2, weiterhin aufweisend Einrichtungen (102, 106, 110) zum Verriegeln einer Frontplatte (96) an der oberen Wand des versetzten Netzanschlussgehäuses (12).

9. Modulare Kabelleistensteckdosenstation nach Anspruch 1, bei der das versetzte Netzanschlussgehäuse (12) und der Datenübertragungsanschluss (14) gesonderte, nicht integrale Elemente sind.

Revendications

1. Station de sortie de canalisation modulaire (10) utilisable avec un conduit de liaison principal (18) qui comporte une paroi de séparation (22) et une ouverture d'accès supérieure (28), comprenant :

une boîte de puissance décalée (12) ayant
une saillie (66) qui s'étend latéralement à partir d'une paroi supérieure (38) de la boîte (12) et comporte une partie supérieure (68) et une partie de butée (74) dirigée vers le bas à partir de l'extrémité de la partie supérieure et prévue pour être placée sensiblement en ali-

gnement avec un bord adjacent de l'ouverture d'accès supérieure (28) ; et

une découpe (80) formée dans la partie de butée (74) de la saillie (66) et en communication avec une ouverture formée dans une paroi latérale de la boîte (12) adjacente au conduit (18) ; et

une extension de communication (14) prévue pour être placée sur l'ouverture d'accès supérieure (28) du conduit et présentant

une surface de butée (94) dirigée vers le bas à partir d'une surface supérieure (88) de l'extension (14) et prévue pour être placée en affleurement contre la partie de butée (74) de la saillie ;

une encoche de passage de conducteurs formée dans la surface de butée (94) ; et

une paroi de guidage (120) dirigée vers le bas à partir de l'extension (14), intérieurement adjacente à l'encoche de passage (116) et prévue pour être sensiblement alignée verticalement avec la paroi de séparation (22) ;

dans laquelle les conducteurs de puissance (34) peuvent être acheminés hors du conduit (18) et au-dessus de celui-ci, à travers l'encoche de passage (116), et introduits dans la boîte de puissance décalée (12) avant installation de l'extension (14), de sorte que les conducteurs de puissance (34) sont isolés des conducteurs de communication (36) lorsque l'extension est installée.

2. Station de sortie de canalisation formée unitairement (10) utilisable avec un conduit principal de liaison (18) qui comporte une paroi de séparation (22) et une ouverture d'accès supérieure (28), comprenant :

une boîte de puissance décalée (12) ayant une saillie (66) qui s'étend latéralement à partir d'une paroi supérieure (38) de la boîte (12) ;

une extension de communication (14) prévue pour être disposée sur l'ouverture d'accès supérieure (28) du conduit et comportant une paroi de guidage (120), dirigée vers le bas à partir de l'extension (14) et prévue pour venir sensiblement en alignement vertical avec la paroi de séparation (22) ; et

une paroi de butée (126) disposée entre la saillie (66) de la boîte décalée et l'extension (14), dirigée vers le bas partiellement à partir de chacune de ces dernières, et comportant une encoche de passage (116) formée latéralement à travers la dite paroi de butée (126) et en communication avec une ouverture formée dans une paroi latérale de la boîte adjacente au conduit ;

dans laquelle les conducteurs de puissance (34) peuvent être acheminés hors du conduit (18) et au-dessus de celui-ci, à travers l'encoche de passage (116), et introduits dans la boîte de puissance décalée (12), de sorte que les conducteurs de puissance (34) sont isolés des conducteurs de communication (36).

3. Station de sortie de canalisation modulaire selon la revendication 1 ou 2, comprenant en outre des bossages d'alignement (76) qui s'étendent et sont dirigés vers le bas à partir de la partie de butée (74) et sur lesquels sont disposés des moyens (78) de verrouillage prévus pour être fonctionnellement associés au conduit (18), dans laquelle les bossages d'alignement (76) sont en outre prévus pour servir de butée de positionnement d'un couvercle (30) du conduit.

4. Station de sortie de canalisation modulaire selon la revendication 3, comprenant en outre des moyens de verrouillage d'extension (112) qui sont dirigés vers le bas à partir de l'extension (14) et prévus pour être fonctionnellement associés au conduit (18), et des moyens de verrouillage d'une plaque de façade (96) à la surface supérieure de l'extension (14), espacés dans la direction longitudinale à l'extérieur de chaque moyen de verrouillage d'extension.

5. Station de sortie de canalisation modulaire selon la revendication 4, comprenant en outre des encoches d'alignement (110) formées dans la surface de butée (94) et situées longitudinalement à l'extérieur de chaque moyen de verrouillage de plaque de façade (96), de façon adjacente à la boîte de puissance décalée (12), qui sont fonctionnellement associées aux bossages d'alignement pour aligner les parois d'extrémité de la boîte et les surfaces d'extrémité de l'extension.

6. Station de sortie de canalisation modulaire selon la revendication 4, dans laquelle les moyens de verrouillage de plaque de façade comprennent des éléments de verrouillage évidés (100) près de chaque angle de l'extension (14).

7. Station de sortie de canalisation modulaire selon la revendication 4, dans laquelle les moyens de verrouillage de plaque de façade (96) comprennent des trous (106) ménagés dans la surface supérieure de l'extension (14) et des bossages de montage dirigés vers le bas (102) disposés sous chaque trou (106).

8. Station de sortie de canalisation modulairé selon la revendication 1 ou 2, comprenant en outre des moyens (102, 106, 110) pour verrouiller une plaque de façade (96) à la paroi supérieure de la boîte de

puissance décalée (12).

9. Station de sortie de canalisation modulaire selon la revendication 1, dans laquelle la boîte de puissance décalée (12) et l'extension (14) sont des éléments séparés non solidaires.

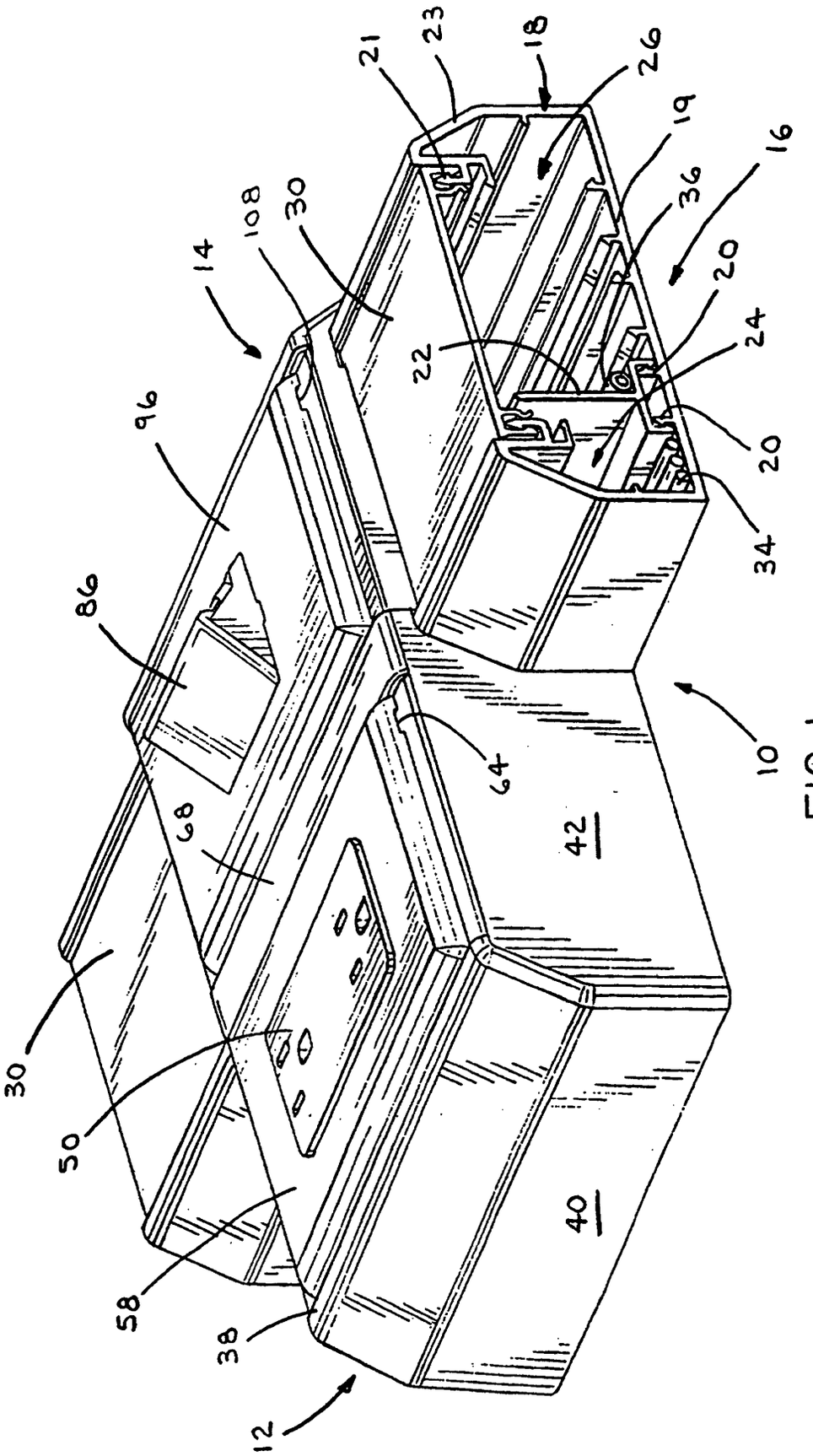

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FIG. 1

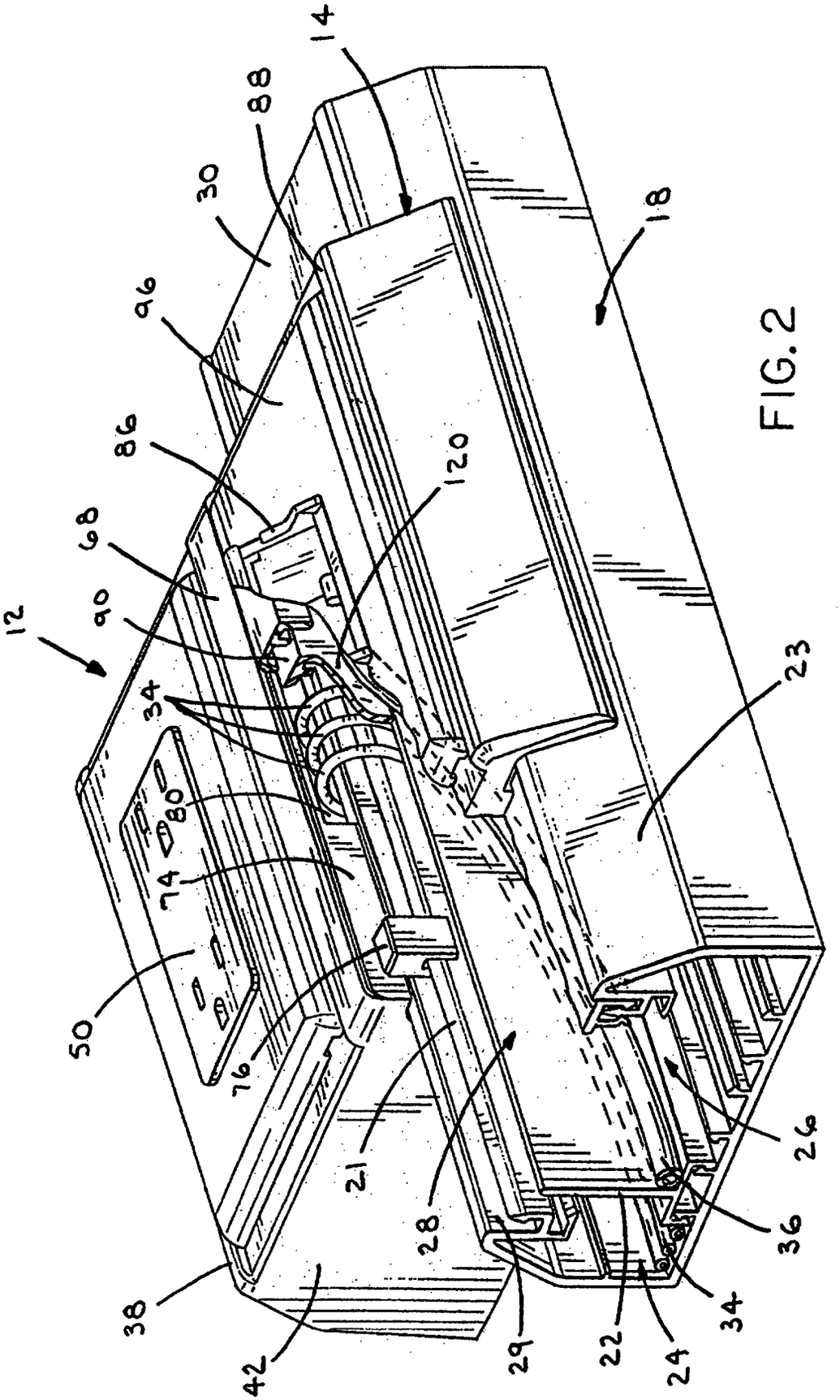
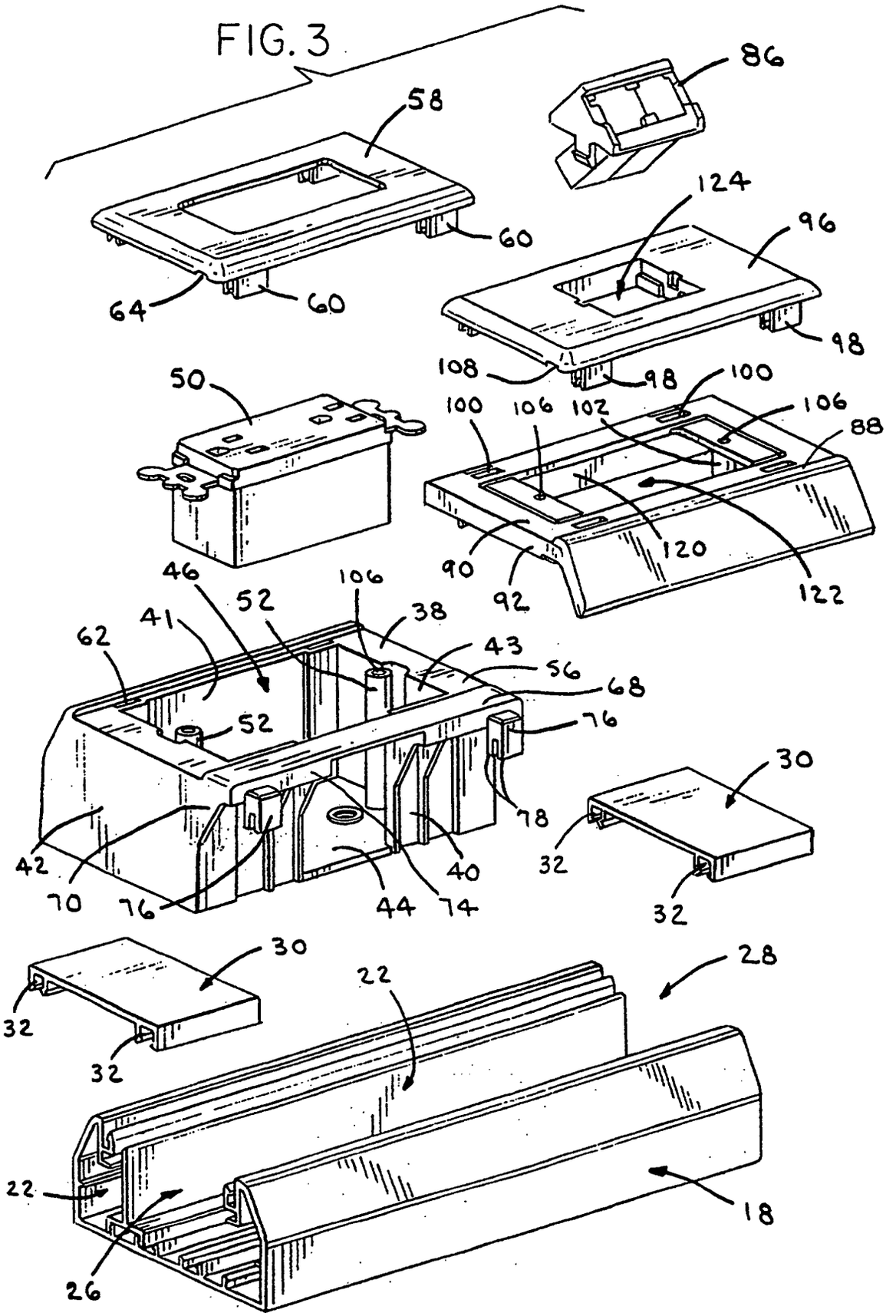

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FIG. 2

FIG. 3


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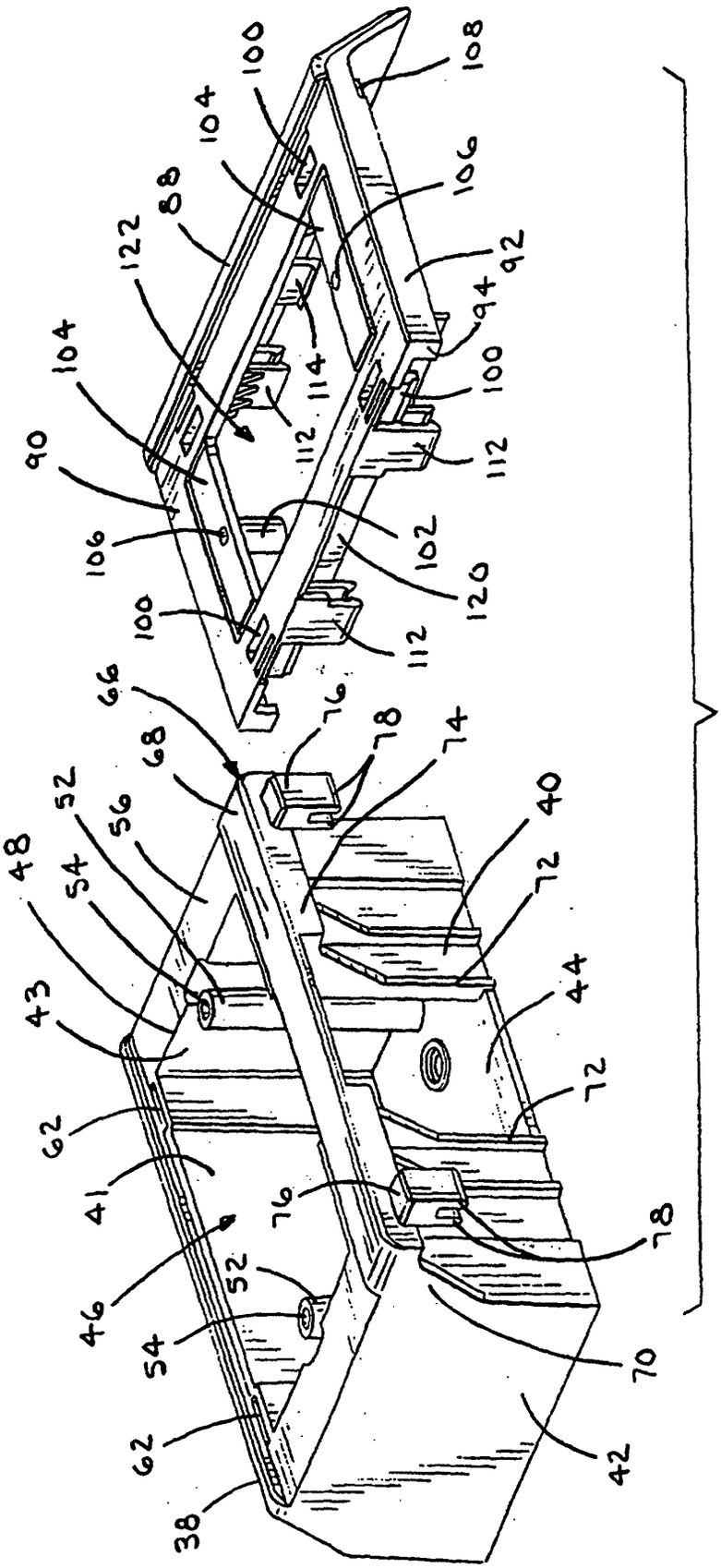

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FIG. 4

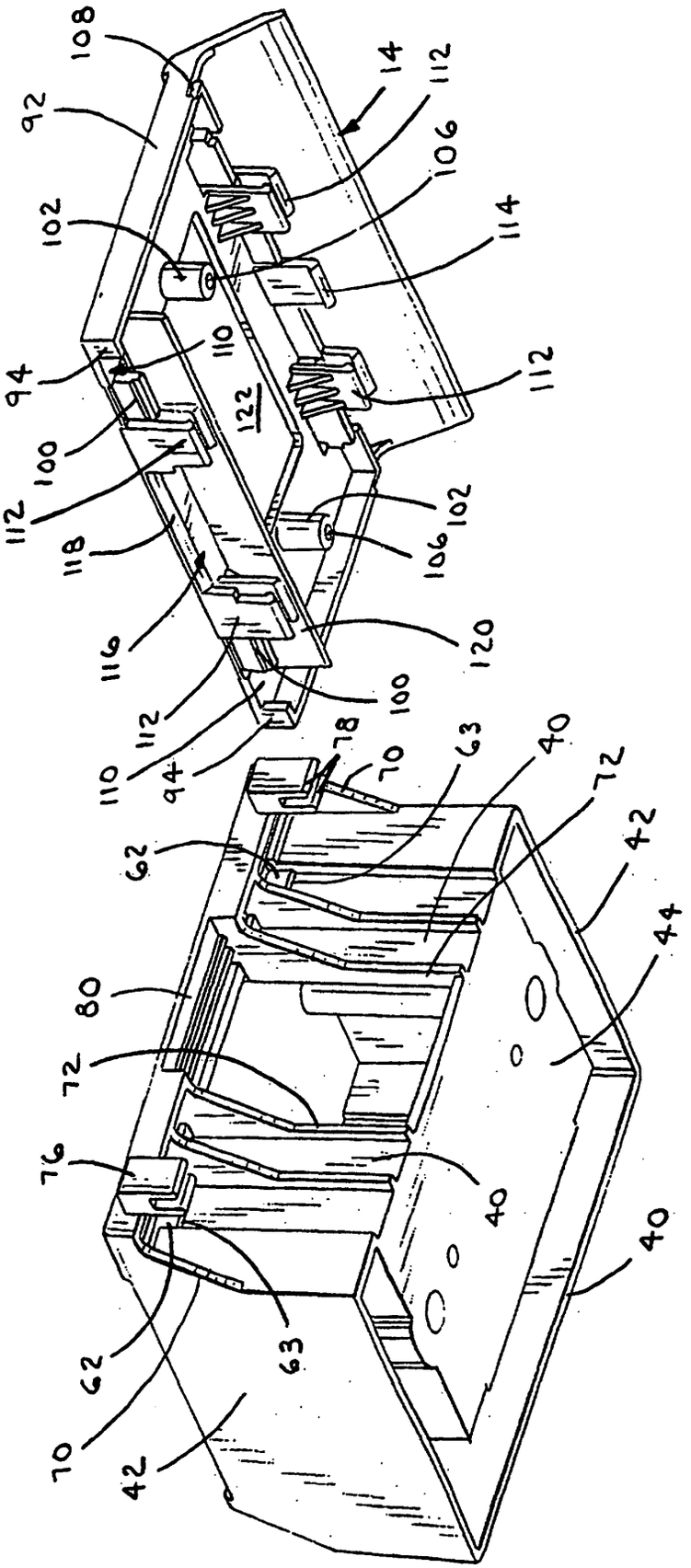

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FIG. 5

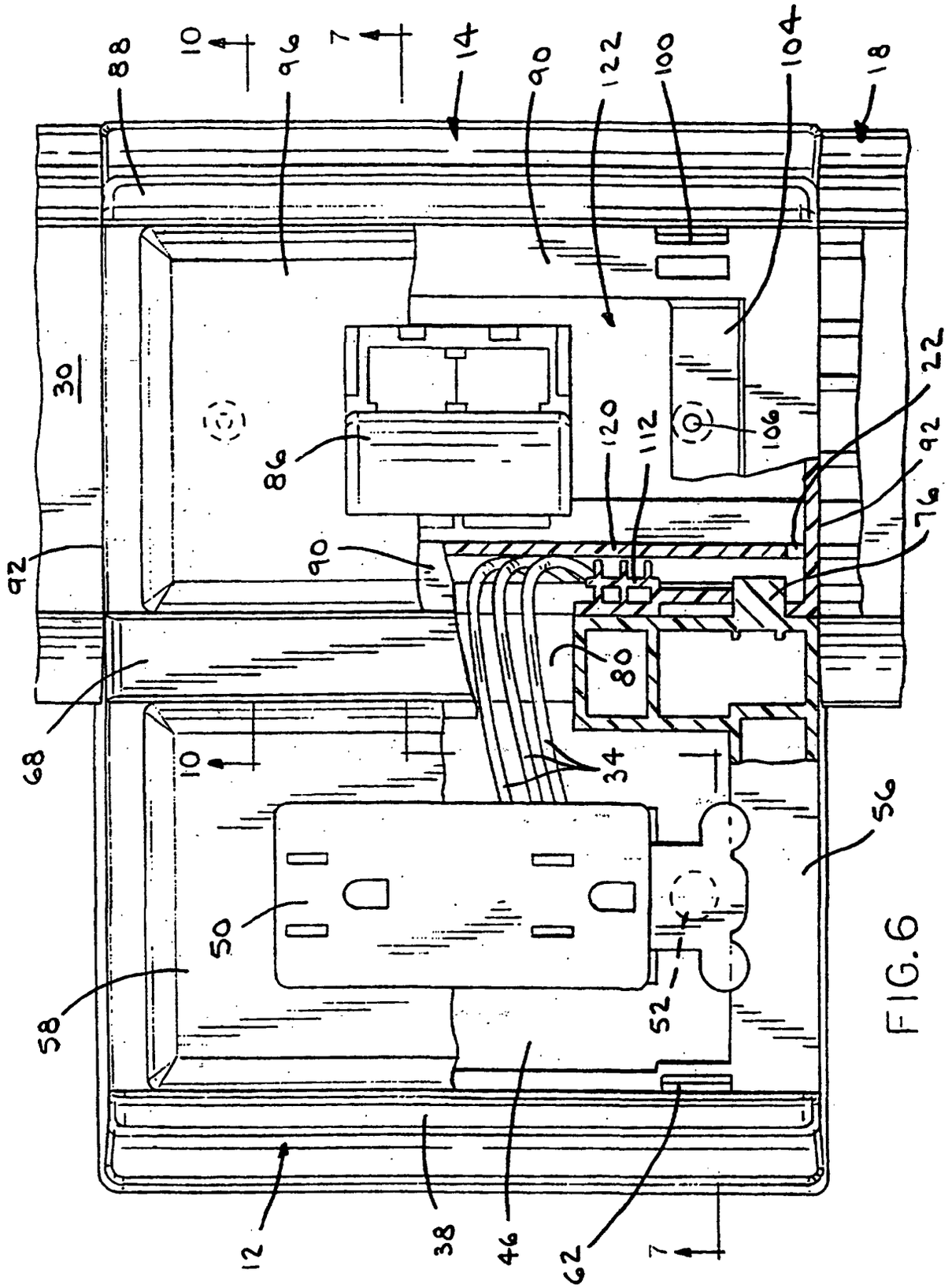

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FIG.6

FIG. 7

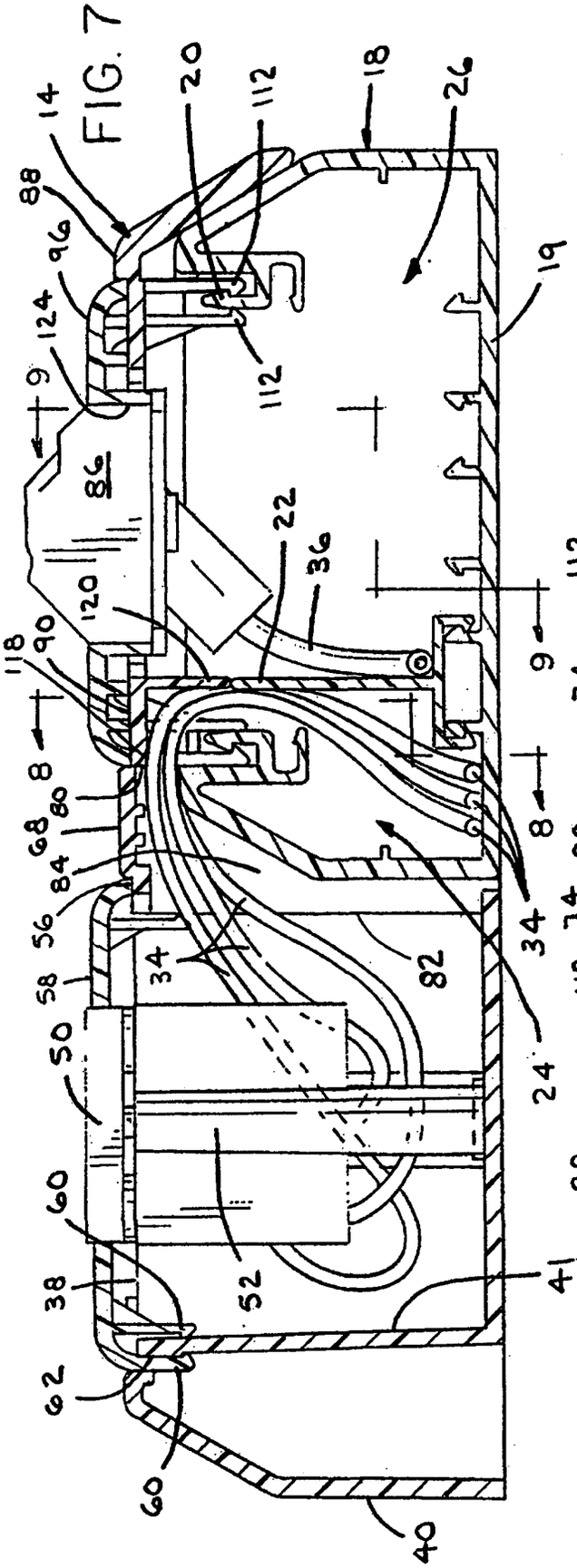
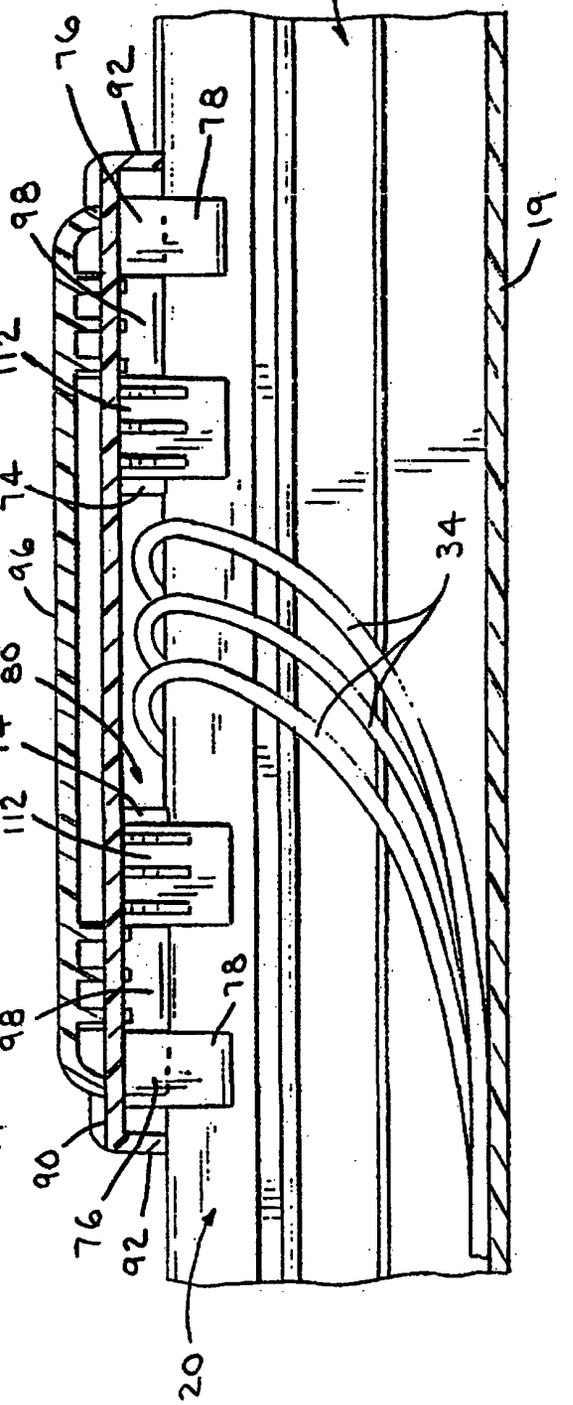

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FIG. 8


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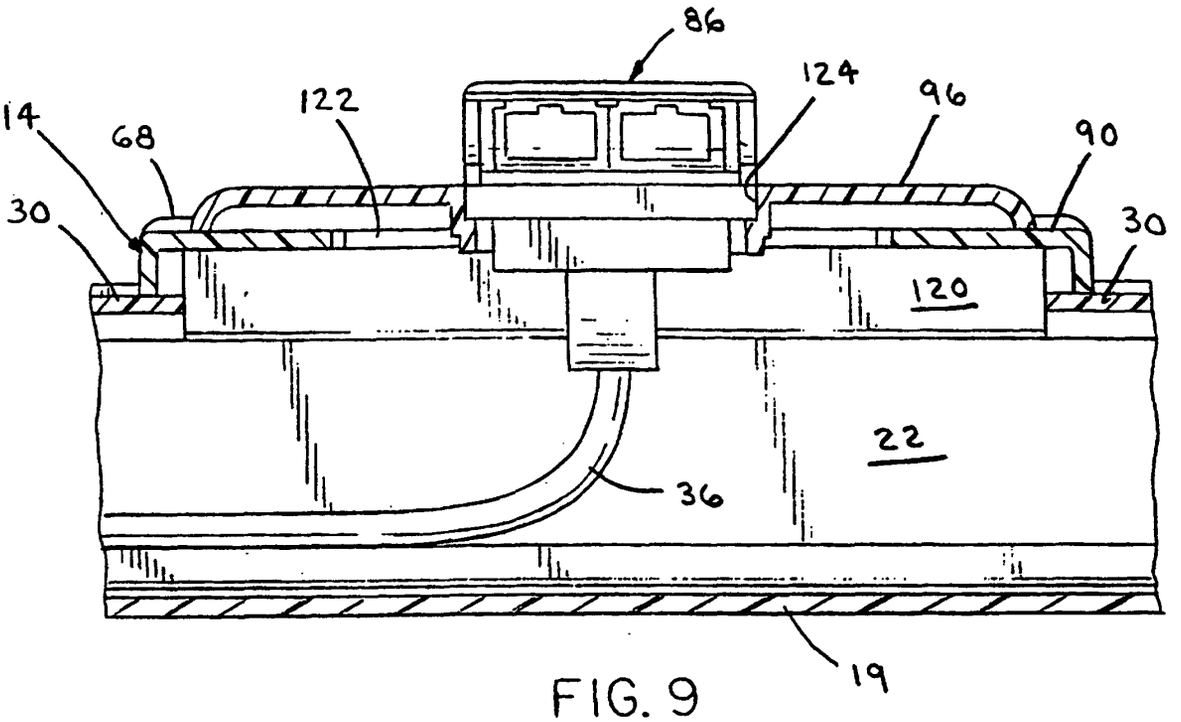

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FIG. 9

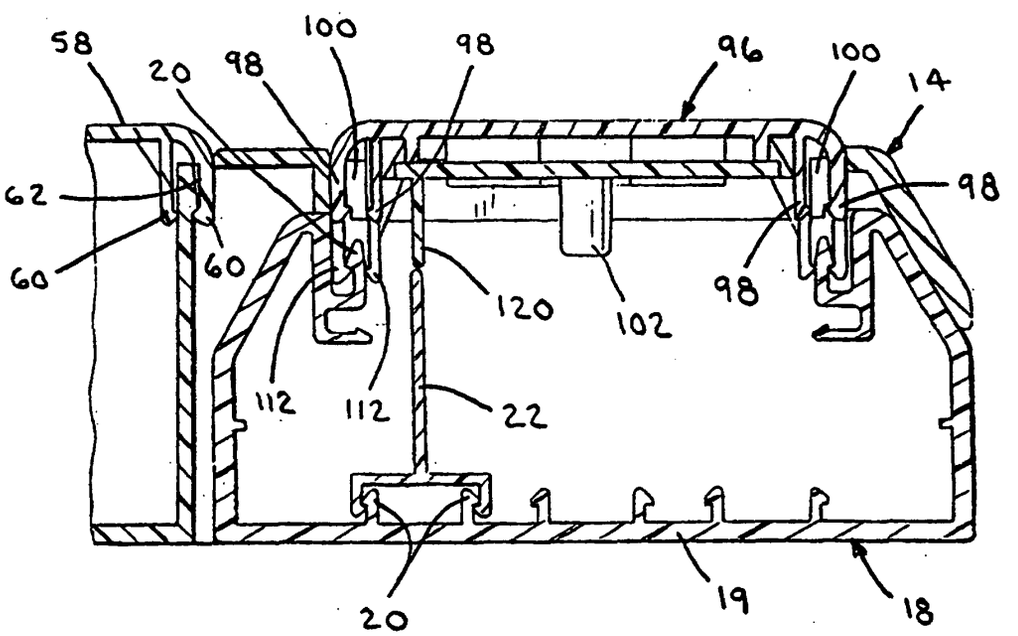

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FIG. 10

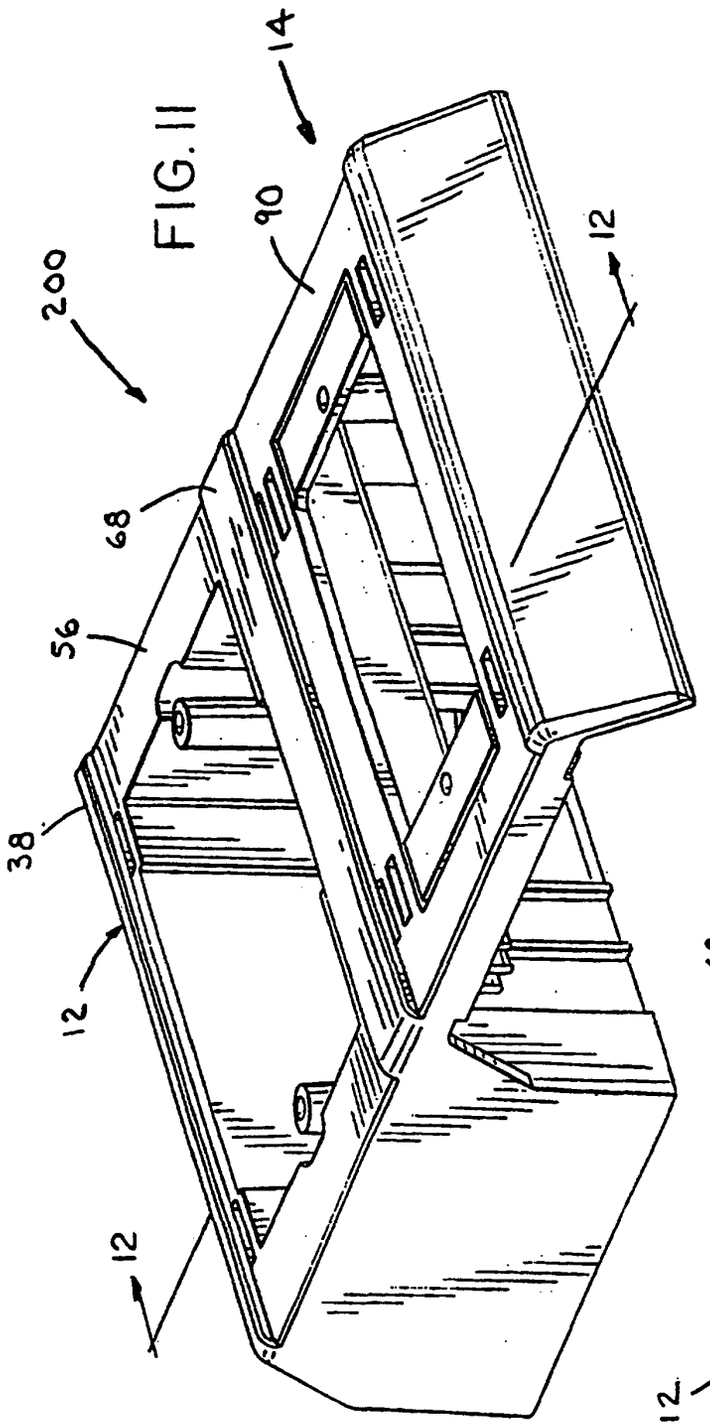


FIG. 11

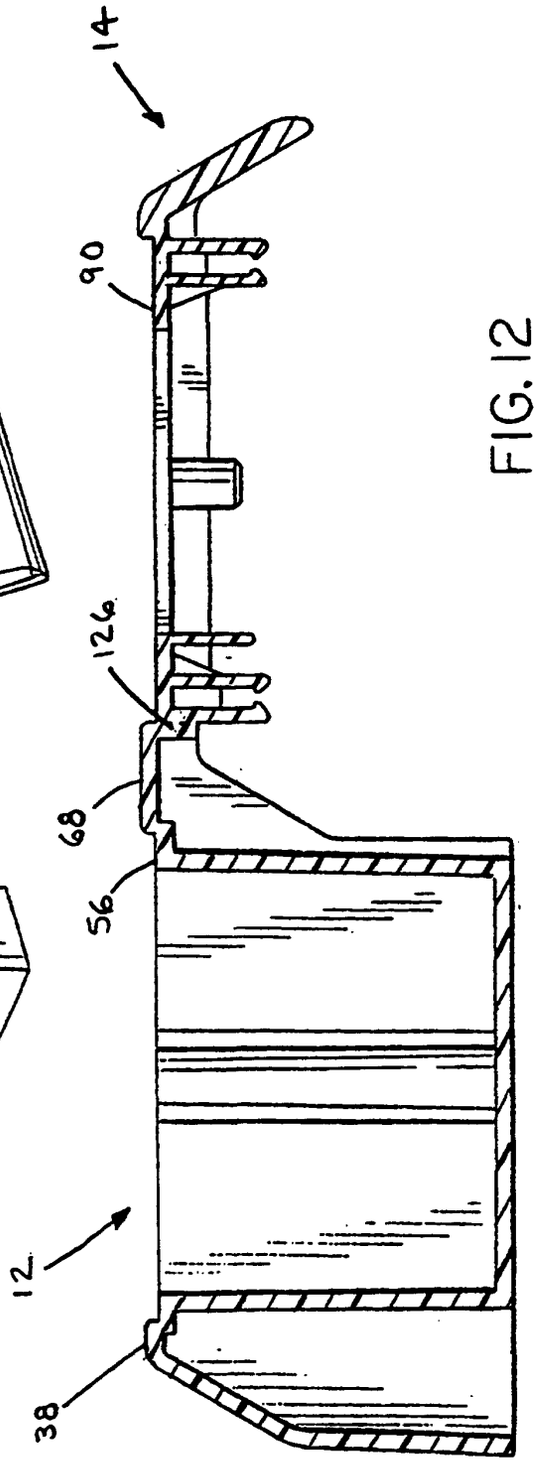


FIG. 12